

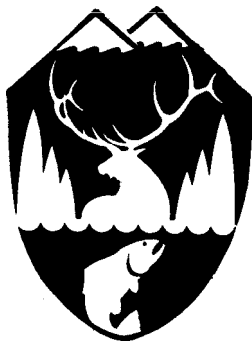
IDAHO

DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

GRACE HATCHERY

Annual Report



1 October 1982 - 30 September 1983

by
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Fish Hatchery Superintendent II

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TABLE OF CONTENTS

	<u>PAGE</u>
ABSTRACT	1
OBJECTIVES	2
INTRODUCTION	2
FISH PRODUCTION	3
FISH HEALTH	4
SPAWNTAK I NG OPERATION	4
HATCHERY IMPROVEMENTS	4
PUBLIC RELATIONS	5
RECOMMENDATIONS	5
ACKNOWLEDGEMENTS	5

Grace Hatchery

ABSTRACT

During the 1982 fishery year we received 2,827,484 eyed eggs from commercial suppliers and our own hatcheries. Rainbow, two species of cutthroat, mackinaw, brown trout and Henrys Lake hybrids were hatched and reared at this station.

Eighty-nine thousand, three hundred forty-nine (89,349) pounds of fish were produced for Idaho's waters. This amounted to 1,760,136 fish of these five species.

One hundred sixty-three thousand, one hundred (163,000) pounds of fish feed was consumed by these fish at a cost of \$31,098.82. Cost of feed per pound of fish was \$.348 and 1.83 pounds of feed produced each pound of fish flesh.

The St. Charles Creek trapping operation was continued this year and was successful. This is a cooperative effort with the state of Utah to enhance the Bear Lake cutthroat fisheries in Utah and Idaho.

A new Harrington fish feeder was put into operation during the year. We received a new Dodge, 1-ton, 4 x 4 pickup truck. Some improvements were made to the residences and the painter scraped and painted most of the exteriors of all our buildings.

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Fish Hatchery Superintendent II

OBJECTIVES

To rear 100,000 pounds of trout, mainly rainbow, for a five county area of Southeastern Idaho. Streams, rivers, lakes and reservoirs are stocked in Franklin, Bear Lake, Caribou, Oneida and Bingham counties.

Operation of a fish trap on St. Charles Creek. This stream is a tributary to Bear Lake. Adult Bear Lake cutthroat are trapped in May and hauled to Utah's Swan Creek trap for spawning. Utah personnel spawn these fish and return them to the lake. The eggs are sent to Utah's Mantua Hatchery for eyeing and rearing. These fingerlings are then returned to Bear Lake and the tributary streams. This is a joint effort with Utah to enhance and insure the future of this fish in Bear Lake.

To rear other species of trout for the waters of Idaho when ample space is available at this hatchery.

INTRODUCTION

Grace Hatchery was constructed in 1946. It is located in Southeastern Idaho in Caribou County. We are eight miles from the small town of Grace, Idaho, just two miles east of Highway 34.

The hatchery is spring fed; these springs form a small stream known as Whiskey Creek. The water temperature remains a fairly constant 52°F year round. Water flows vary from year to year depending upon snow pack and irrigation needs by local farmers. Low years of flow from 9 cfs to high years of over 20 cfs have been recorded. Water quality is excellent for trout rearing with very few disease problems.

Our incubation room, sixteen hatchery vats, a small shop, a feed storage room and a walk-in freezer are housed in a large wooden building.

We have twelve nursery raceways, four measuring 60' long by 7' wide, four 60' long by 3' wide and four 100' long by 4' wide.

Six large raceways located at the southern end of the property measure 300' long by 14' wide. We use these mainly for rearing catchable fish for stocking.

We have housing for three permanent employees, one four and one two car garage and two small storage buildings. The office building contains a small shop, office and an area to house a temporary employee.

FISH PRODUCTION

Eggs received and hatched at this station during the year:

<u>Species</u>	<u>Number of Eggs</u>	<u>Source</u>
Rainbow	864,416	Hayspur Hatchery
Rainbow	371,444	Aqua-Life Corp.
Cutthroat (fine-spot)	465,526	Auburn Hatchery
Cutthroat (Bear Lake)	538,356	Utah's Egan Hatchery
Brown Trout	306,240	Nebraska's Crawford Hatchery
Hybrids (rainbow x cutthroat)	281,502	Henrys Lake Hatchery
Total	2,827,484	

Following is a breakdown of fish stocked and transferred from this station during the year:

<u>Species</u>	<u>Size</u>	<u>Number of Fish</u>	<u>Number of Pounds</u>
Rainbow	6 inch plus	231,028	55,566
Rainbow	3-6 inch	270,550	6,700
Rainbow	0-3 inch	86,400	150
Mackinaw	6 inch plus	66,800	8,350
Cutthroat C5	3-6 inch	290,179	11,270
Cutthroat C4	6 inch plus	32,960	3,200
Cutthroat C4	0-3 inch	297,505	1,645
Brown Trout	3-6 inch	72,100	875
Brown Trout	0-3 inch	200,304	963
Hybrids	0-3 inch	212,310	630
Totals		1,760,136	89,349

Fish feed consumed by our fish during the year:

<u>Size</u>	<u>Number of Pounds</u>	<u>Price</u>
No. 1 fry feed	1,000	\$ 246.87
No. 2 fry feed	3,400	840.40
No. 3 fry feed	7,950	1,963.73
No. 4 fry feed	20,450	4,270.38
No. 5 crumbles	32,235	6,195.10
3/32 pellet	52,485	9,416.27
4/32 pellet	43,380	7,335.55
OMP (Moist feed)	2,200	830.51
Totals	163,100	\$31,098.82

This calculates out to 1.83 pounds of feed to produce each pound of fish flesh. Cost of feed per pound of fish is \$.348.

The Bear Lake cutthroat we received from Utah last year were stocked in Blackfoot Reservoir during June. 290,179 fish, 11,270 pounds, were stocked at the mouth of Little Blackfoot River. We adipose fin clipped 133,424 of these fish for future study and return to creel information. These fish were exposed to two weeks of Morphiline prior to stocking and two weeks after stocking to imprint a homing instinct for future egg taking on Little Blackfoot River.

FISH HEALTH

We had an outbreak of cold water disease in our rainbow from Hayspur Hatchery. We dipped these fish in a salt and copper sulphate solution several times and administered medicated feed to control this disease.

Bacterial Gill disease and Fungus caused us some concern and was treated with Purina 4X.

We received one shipment of eggs from Aqua-Life that was confirmed to be carrying IPN virus and was stocked as fingerling to prevent an outbreak at this station.

SPAWNTAKING OPERATION

The St. Charles Creek trap was operated by Eric Harwood from May 2 to June 19, 1983. This trap is installed on St. Charles Creek, a tributary of Bear Lake, to cooperate with Utah for enhancement of Bear Lake cutthroat. 115 females and 81 males were trapped and transported to Utah's Swan Creek trap for spawning. We released 25 males and 26 females above our trap for natural spawning and an undisclosed number escaped our trap due to high waters. Utah had to pull their Swan Creek Trap again this year to save it because of heavy runoff.

HATCHERY IMPROVEMENTS

We received a new Harrington fish feeder and are now able to weigh the feed for our large raceways. A used International tractor was sent to us from our Nampa station and it is used to pull the fish feeder and other chores that are required on station.

Improvements that were completed this year on some of our buildings included a new ceiling fan at residence #1, a new wood burning stove in residence #3 and a wood-coal burning stove was built for our four-car garage.

The painter scraped and painted the hatchery building, all three residences and several of our small outbuildings.

We received a new replacement 4x4, 1-ton, Dodge pickup truck to be used for snowplowing, fish hauling and other jobs at the station.

The compressor unit was replaced in our walk-in freezer. This unit is used for confiscated game and fish and we use it for any moist feeds needed at our station.

We obtained some new hand and power tools to help make our work a little easier on the station.

PUBLIC RELATIONS

Approximately 2,500 visitors toured the station during the year. We had several school classes and Boy Scout groups during the spring months. The settling pond had to be closed to fishing to protect the hatchery property.

RECOMMENDATIONS

We still need to put some asphalt or better fill around the large raceways. These raceway walls are starting to deteriorate badly and will possibly need to be replaced in the near future.

A new set of nursery raceways should be designed and built to accommodate Grace Hatchery rearing so many different species of trout.

We need another two-stall garage at residence #3 for keeping personnel equipment stored during our severe winter months.

A new tractor should be purchased for snow removal. It should be equipped with a snowblower and a bucket. We have a very hard time keeping the roadways open and raceways cleared during the winter months.

ACKNOWLEDGEMENTS

Fish Hatchery Superintendent II
Fish Hatchery Superintendent I
Fish Culturists

Bio-Aides

CETA employee

Jerry Mowery
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